

WHAT IS CLAIMED IS:

1 1. A method for providing uniform service discovery through the use of a
2 plurality of service discovery protocols, comprising:
3 generating service discovery queries from a user interface;
4 translating the service discovery queries into formats required by each of
5 the plurality of service discovery protocols;
6 receiving results indicative of services found from each of the plurality of
7 service discovery protocols in response to the service discovery queries; and
8 translating the results into a uniform format for display on the user
9 interface, wherein the uniform format is independent of the plurality of service discovery
10 protocols.

1 2. The method according to Claim 1, further comprising translating the service
2 discovery queries into a format required by a service discovery engine.

1 3. The method according to Claim 2, wherein the service discovery engine
2 compiles service discovery results in response to the service discovery queries and
3 provides the service discovery results to the user interface.

1 4. The method according to Claim 3, wherein the service discovery engine
2 gains access to the plurality of services found.

1 5. The method according to Claim 4, wherein the service discovery engine
2 provides access to the plurality of services found to a plurality of network entities within a
3 domain of the service discovery engine.

1 6. The method according to Claim 1, wherein the plurality of service
2 discovery protocols includes Bluetooth service discovery protocol.

1 7. The method according to Claim 1, wherein the plurality of service
2 discovery protocols includes one or more of Service Location Protocol (SLP), Salutation,
3 Jini, Bluetooth, and Universal Plug and Play (UPnP).

- 1 8. A service discovery system, comprising:
 - 2 a first service discovery agent coupled to receive service discovery queries
 - 3 in a user format and coupled to transform the user formatted service discovery queries into
 - 4 a plurality of formats each dependent upon a plurality of respective service discovery
 - 5 protocols; and
 - 6 a second service discovery agent coupled to receive service discovery
 - 7 queries from the first service discovery agent and in response, to provide service discovery
 - 8 responses to the first service discovery agent, wherein the second service discovery agent
 - 9 is coupled to access services discovered by the first service discovery agent.
- 1 9. The service discovery system according to Claim 8, wherein the first service discovery agent comprises a service configuration tool coupled to allow first discovery agent operation independent of second service discovery agent operation.
- 1 10. The service discovery system according to Claim 9, wherein the first service discovery agent further comprises a canonical query transform coupled to provide the plurality of transformed formats.
- 1 11. The service discovery system according to Claim 10, wherein the canonical query transform is configured with a programmable number of format capabilities.
- 1 12. The service discovery system according to Claim 11, wherein the programmable number of format capabilities is dependent upon a number of plug in modules installed within the canonical query transform.
- 1 13. The service discovery system according to 12, wherein the programmable number of format capabilities includes Bluetooth service discovery protocol.
- 3 14. The service discovery system according to 12, wherein the programmable number of format capabilities includes one or more of Service Location Protocol (SLP), Salutation, Jini, Bluetooth, and Universal Plug and Play (UPnP).

1 15. A network host, comprising:
2 means for receiving service discovery queries from a service discovery
3 agent;
4 means for discovering services within a domain of the network host in
5 response to the service discovery queries;
6 means for providing the services discovered within the domain of the
7 network host to the service discovery agent; and
8 means for accessing services within a domain of the service discovery
9 agent.

1 16. The network host according to Claim 15, further comprising means for
2 providing access to the services within the domain of the service discovery agent to
3 network entities within the domain of the network host:

1 17. A computer-readable medium having instructions stored thereon which are
2 executable by a network host processing system for facilitating service discovery by
3 performing steps comprising:
4 receiving service discovery queries from a service discovery agent;
5 discovering services within a domain of the network host in response to the
6 service discovery queries;
7 providing results of the services discovered within the domain of the
8 network host to the service discovery agent; and
9 accessing services within a domain of the service discovery agent.

1 18. The computer-readable medium according to Claim 17, further comprising
2 instructions to allow network entities within the domain of the network host to access
3 services within the domain of the service discovery agent.

1 19. A mobile terminal wirelessly coupled to a network having a service
2 discovery engine, the mobile terminal comprising:
3 a memory capable of storing a service discovery agent coupled to locate
4 services having a plurality of service description protocols in response to received user
5 queries having a user format;
6 a processor coupled to the memory and configured by the service discovery
7 agent to enable service discovery query exchange with the service discovery engine; and
8 a transceiver configured to facilitate the service discovery query exchange
9 with the service discovery engine, wherein the transceiver further facilitates access to the
10 services having a plurality of service description protocols by the service discovery engine.

1 20. The mobile terminal according to Claim 19, wherein the service discovery
2 agent comprises a service configuration tool coupled to allow service discovery agent
3 operation independent of the service discovery engine.

1 21. The mobile terminal according to Claim 20, wherein the service discovery
2 agent further comprises a canonical query transform coupled to translate the user queries
3 into a format required by the plurality of service description protocols.

1 22. The mobile terminal according to Claim 21, wherein the canonical query
2 transform is further coupled to translate responses from the plurality of service description
3 protocols into the user format.

1 23. A computer-readable medium having instructions stored thereon which are
2 executable by a mobile terminal processing system for providing service discovery by
3 performing steps comprising:
4 receiving service discovery queries in a user format;
5 transforming the user formatted service discovery queries into a plurality of
6 formats relating to a plurality of service discovery protocols;
7 receiving service discovery results in a plurality of service discovery
8 protocols in response to the service discovery queries; and
9 transforming the service discovery results into the user format.

1 24. The computer-readable medium according to Claim 23, further comprising
2 instructions to perform steps comprising:
3 providing the service discovery queries to a network host; and
4 receiving responses from the network host in response to the provided service
5 discovery queries.